

MU120 Mailing 2 2009J
S 008055



Stop Press Read this first!

MU120 Open mathematics 2009J Stop Press 2

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1 Introduction

You should by now have received the preparatory material and are probably familiarising yourself with the areas of maths highlighted as needing practice when you tried the Diagnostic Quiz. You should also have one of the recommended course calculators from the TI-83 /TI-84 range or the TI-82 STATS and be using it as part of your preparation.

If you enjoy working online then you might find it useful to test your skills on the preparatory material in our online quizzes. You will find these on the MU120 course website - under the heading Preparation, choose the 'How's your mathematics' link. These are optional extras to the preparatory materials. There is more information about the course website, including how to find it, in Section 4 of this Stop Press.

In this pack you will find your first material for the main course. Please check the contents and read through this Stop Press for important information. These course materials can then be put on one side until you have finished working through the preparatory material or the start date for Unit 1. Please feel free to contact your tutor for further advice about your study priorities, once you have received their details. There should be two later mailings, the first containing Block B, and the second Blocks C and D. Please open each mailing as soon as it arrives in case there is last minute information in a Stop Press concerning an assignment.

2 Essential course information

(i) Errata

Apologies for the inconvenience caused by these errata. Note that a negative line reference indicates counting from the bottom of the page.

Tapping into mathematics with the TI-83 graphics calculator

In addition to the following errata, there are a number of references to the TI-83 Guidebook which are now inappropriate. These are to the Guidebook for the basic model of the TI-83. The references are not valid for the Guidebooks for later models, such as the TI-83 Plus or the TI-83 Silver Edition, and should be ignored. (If you purchased your calculator from Oxford Educational Supplies, there is a PDF of the Guidebook for your model on the accompanying CD. Otherwise, the Guidebook is available at <http://education.ti.com/us/global/guides.html>)

Page 57 line 7

... different types of statistical plot. Press the down cursor key to select Type. Select the fifth icon √ using the left/right cursor keys and confirm your choice using \subseteq .

Page 62 Scatterplot

The data point for Australia (455, 170) has been plotted at (455, 150). The correct plot is shown in the first scatterplot on page 64.

Page 64 second Scatterplot

The data point for Australia (455, 170) has been plotted at (455, 150). The correct plot is shown in the first scatterplot on page 64.

Page 90 line 17

seq is on page A-26, and there you are reminded ...

Page 148 line -2

Should be $Y4 = Y1^2 + Y2^2$

Page 157 third line under the table should read "which now does lie in the range 1/2 to 1"

Page 163 (b)

Store $180 + L1$ in L2.

Store $\cos(L1)$ in L3.

Store $\cos(L2)$ in L4.

Inspect the values in L3 and L4.

Page 205 Exercise 13.2(a)

... investigate the graphs of $y = x^3$, $y = x^4$, $y = x^5$ and so on. ...

Page 216 line -5

$$y - c = ab^x \quad \text{or} \quad y - c = ax^b$$

Page 287 Exercise 10.3(a) and (b)

In order to obtain the exact screens shown, that is with values for r^2 and r included, follow the instructions given at the bottom of page 210 for selecting DiagnosticOn from the CATALOG menu

Page 299 line 13 of COSFOR 1 program

$$2-C^2)/(2AB))$$

Page 304 Exercise 15.8(a)

... with a period which is 1/49 of the period of $y = \sin x$ – that is, ...

Page 307-310 Corrections to the index

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(ii) Study advice

You should work through the course units according to the schedule given on the study calendar. Each unit will tell you when to use other items such as the calculator book, audio or video. The Resource Books provide extra practice of the techniques found in the units. Many students find it easier to complete assignment questions immediately after they have studied the relevant course unit, rather than waiting until nearer the assignment cut-off date, as this saves a last minute panic when the cut-off-dates arrive.

In previous years many students have found the material in Block A of MU120 more straightforward to study than that in the later Blocks. You are therefore advised to keep up to schedule and, if possible, to get ahead with your study of Block A. Block B will be sent to you before you are due to complete your study of Block A.

If at any stage you do find yourself falling behind schedule, please don't hesitate to contact your tutor, who will be pleased to help. This is particularly important if, for any reason, you are thinking about withdrawing from the course. Your tutor may well be able to help you to devise a strategy to enable you to complete the course.

The table below shows how the content of the Preparatory modules are used as building blocks for the rest of the course. For example, an understanding of the content of Module 3 section 2, Proportion, is first assumed in Unit 3 section 2 and then in parts of Units 6, 7 and 13.

Preparatory reference		Course reference	
		Unit (Number & section)	Calculator Book (Chapter & section)
Module 1	1.1 The size of numbers	1 onwards	1.6
	1.2 Units of measurement	1 onwards	
	1.3 Arithmetic	1 onwards	1.2
Module 2	2.1 Rounding	1 onwards	1.2
	2.2 Estimation	5.3	
	2.3 Checking your answers	1 onwards	
Module 3	3.1 Ratio	2.4 onwards	9.3
	3.2 Proportion	2.2 onwards	
	3.3 Percentages	2.1 onwards	1.5
Module 4	4.1 Squares, cubes and roots	1 onwards	1.2, 1.4, 1.7
	4.2 Powers	7.1 onwards	1.4, 12.2-3
	4.3 Scientific notation	1 onwards	1.6, 12.3
Module 5	5.1 Scale diagrams	6.2	
	5.2 Tables and charts	2 onwards	2.1 onwards
	5.3 Graphs	2 onwards	3.2 onwards
Module 6	6.1 Communicating mathematics	1 onwards	1.2 onwards
	6.2 Formulas	2.1 onwards	8.1
Module 7	7.1 Shapes	2.6 onwards	
	7.2 Angles and lines	Unit 6 onwards	9.1, 14.1-3, 15.2-3
	7.3 Areas, volumes and similar shapes	Unit 6 onwards	1.5, 1.7

(iii) Audio and video material

Audio and video

The audio and video materials for MU120 were originally presented on audio or video cassette, but are now presented in digital format. To help you navigate around the material, we suggest that you note down the track number on your player whenever you are asked to stop or pause the material.

Enrichment material

Enrichment material is provided on DVD00096 and DVD00097, and consists of fifteen programmes which were originally broadcast on television. The programmes make up the series *Seeing through mathematics* which is common to the three courses in the Mathematics Entry Suite: MU120 *Open Mathematics*, MST121 *Using Mathematics*, MS221 *Exploring Mathematics*. The programmes are designed to enhance and extend the mathematics discussed in the entry suite, and are not course specific. These programmes are not an essential part of the course and are not necessary viewing to complete the course. However, the course video bands, on the other DVDs, are integral to your study of MU120 and you will be directed from the course text to use those videos at the appropriate time. Of the fifteen maths entry suite programmes some are more closely related to particular Units of MU120 than others, as indicated below.

Programme	Relevant MU120 Units
Taking Off	Preparatory and Unit 1
Wood, Brass and Baboon Bones	Units 2, 5, 6, 10
A Source of Inspiration	Units 14, 15
The Passionate Statistician	Unit 4
Asthma and the Bean	Units 4, 5
Caught in Time	Unit 7
Blue Haven	Units 7, 12, 13
The True Geometry of Nature	Unit 12
A Language for Movement	Units 9, 14
Designer Rides – Jerk and Jounce	Units 11, 13
Deadly Quarrels	Unit 13
Building by Numbers	Unit 14
The Spiral of Silence	Units 2, 3, 4, 5
The Rainbow	In preparation for Unit 16
Refining the View	Units 5, 10, 16

3 General course information

(i) Activity sheets

The loose-leaf sheets included with each course mailing are collectively known as Activity sheets. However, in different parts of the course they may be referred to as learning file sheets, handbook sheets, printed response sheets, printed planning sheets, etc. Please note that where an activity guides you to a Handbook Sheet please look amongst the BLUE printed sheets. For example, Unit 1 Activity 9 and Unit 2 Activity 6.

(ii) The final tutor-marked assignment and your learning file

Later in the course you will be asked to look back over all your work on MU120 and select evidence for TMA04 to show your achievement and progress in several areas including mathematical, calculator and learning skills. You are advised to keep copies of all your assignments, including your notes and work on CMA questions, in a file, so that you can refer to these as you complete the later assessments.

As was explained in Stop Press 1, it is hoped that you will keep any completed Activity sheets and notes, assignments and other work on MU120 in a file, referred to as your learning file. Please note that there is no expectation that you will complete these Activity sheets. Most students find that completing the blue handbook sheets is useful for reference later on and some students make similar notes for the calculator functions, as they work through the course. Finding out what works best for you is an important part of your learning on MU120, so please use a learning file or not as it suits you.

(iii) CMA results

Please note that CMAs on MU120 must be sent to arrive at the University on or before the cut-off date. Your results and feedback will not be despatched until after the cut-off date, as given on the study calendar.

(iv) Word processing TMAs

Some students spend excessive time on word processing their assignments to try to achieve a perfection that adds a further burden to a busy study schedule. If you prefer to word process the 'words' of your assignments it is perfectly acceptable, but it may be a better use of your time to add in formulas and diagrams by hand. Mathematical notation and diagrams are often more accurate when produced by hand, rather than on a word processing package which isn't designed to handle such material. Your aim should be to produce work that is clearly presented and hence easy for your tutor to read whether hand-written or word-processed. Mathematical notation, calculations and tables should be given in the format used in relevant examples in the course.

Please remember that TMAs should be submitted *to your tutor* using the address they have given you.

4 Other information

(i) Course website

MU120 has a website to support teaching and learning activities and to keep you in touch with last minute news affecting your studies and also to provide useful supporting information. It is strongly recommended that you check this site frequently, so that you will see any recently-posted information. The course-related documents available via the website are generally duplicates of material which has already been sent to you in hardcopy.

The MU120 course website contains the Latest Course News and the following information:

Course Resources (link to course material and online resources)

Study Planner (an online version of the study calendar)

Course Forum (a link to the OUSA course forum)

The course website also has links to your StudentHome page and to OU administrative websites.

Your course website is accessible from your OU StudentHome page at www.open.ac.uk/students, where it will be shown as one of the online resources allocated to you. You will need to use the supplied OU computer username and password.

(ii) OU Mailbox

From your OU StudentHome page, you can access your OU Mailbox. The University and your tutor may send messages directly to this mailbox, so you should check it regularly. If you prefer, you may automatically forward messages received in your OU Mailbox to your preferred (non-OU) email account. To do this, please see the Appendix at the end of this Stop Press.

(iii) Online course forum

MU120 has an online course forum run by the Open University Students Association. This provides students with an informal conference in which to discuss and exchange information about the course (within certain rules) and to provide peer support. Please feel free to contribute to these conferences, as they can be an invaluable source of extra support. The OUSA course forums are open to all students and everyone using them must abide by the OU Code of Conduct and OUSA's 'Spirit of Conference' which sets out the aims of the individual conferences.

These course forums can be accessed from your OU StudentHome page at www.open.ac.uk/students. Further details are available from the OU's Computing Guide at www.open.ac.uk/computingguide.

There is no expectation that tutors (or any other member of OU staff) will look at or respond to messages in the OUSA course forums, though some may choose to do so on a purely voluntary basis.

iv) Working online with computers

The University takes the issue of safe computing very seriously, and recommends that all its staff and students take precautions to ensure that their computers are not vulnerable. In order to help you do this,

the Faculty has created a website and email bulletin service, which describes possible security issues, and suggests what you might do to protect your computer. It is particularly important that you take action if you are regularly going on-line, whether for your OU work, or otherwise, but the advice is intended for all computer users. The information and advice can be found at:
<http://safecomputing.open.ac.uk>

(v) The M500 Society

Joining the M500 Society could be a way of alleviating the isolation of studying alone. It is a mathematical society for OU students, staff and friends, which, through a magazine published several times a year, provides a forum for discussion, comment, argument and fun!

The Society also publishes a directory of members who agree to be sources of help and advice on listed courses. It runs a popular weekend each September for examination preparation, for which members are entitled to a discount, as well as a weekend in January for mathematical fun.

Enquiries: please send a stamped A5 envelope for membership form and free magazine to

Jeremy Humphries
M500 Society
36 Penmanor
Finstall
Bromsgrove B60 3BZ
jeremy@m500.org.uk
www.m500.org.uk

There is also an OUSA forum for M500.

vi) Queries and how to make contact

Information about how to make contact with queries about the course, and other aspects of being an OU student, are given in the Preparatory Stop Press 1. Please keep your copy of Stop Press 1, in case you need this information later in the course.

Appendix - Auto-forwarding email from your OU Mailbox

To auto-forward to your preferred (non-OU) email address, go to your OU StudentHome page and open your OU Mailbox page (which is the same as your FirstClass web mailbox). Click on 'Desktop' and then 'Preferences'. Scroll down to 'Mail rules' and then 'Automatically forward'.

Automatically forward:

Local mail:	No
Internet mail:	No
Voice/fax mail:	No
Method:	Redirect
Forward to:	<input type="text"/>

Use the dropdown arrow to set your required options.

Local mail: is mail within FirstClass

Internet mail: is mail external to FirstClass e.g. A.N.Other@madeup.co.uk

Voice/fax mail: is not activated on our servers

Method: Redirect or Forward

Type the address you are forwarding to in the Forward to: field.

Warning: Please ensure that any email address that you forward to is functional and does not have any automatic response, otherwise you could create a 'mail loop'. This will use up your disk quota and put an unnecessary load on the server to the detriment of other users.

Once you have finished editing your Preferences click on the Save button at the bottom of the Preferences window.